(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/006537 A1

(51) International Patent Classification[7]: H02P 23/00, 27/00

(21) International Application Number: PCT/BR2004/000114

(22) International Filing Date: 14 July 2004 (14.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PI0302419-9 15 July 2003 (15.07.2003) BR

(71) Applicant *(for all designated States except US)*: EMPRESA BRASILEIRA DE COMPRESSORES S.A (EMBRACO) [BR/BR]; Rua Rui Barbosa, 1020, 89219-901 Joinville - SC (BR).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: DAINEZ, Paulo, Sérgio [BR/BR]; Bloco 1, Apartment 302, Rua Rui Barbosa, 1431, CEP- Joinville, SC (BR).

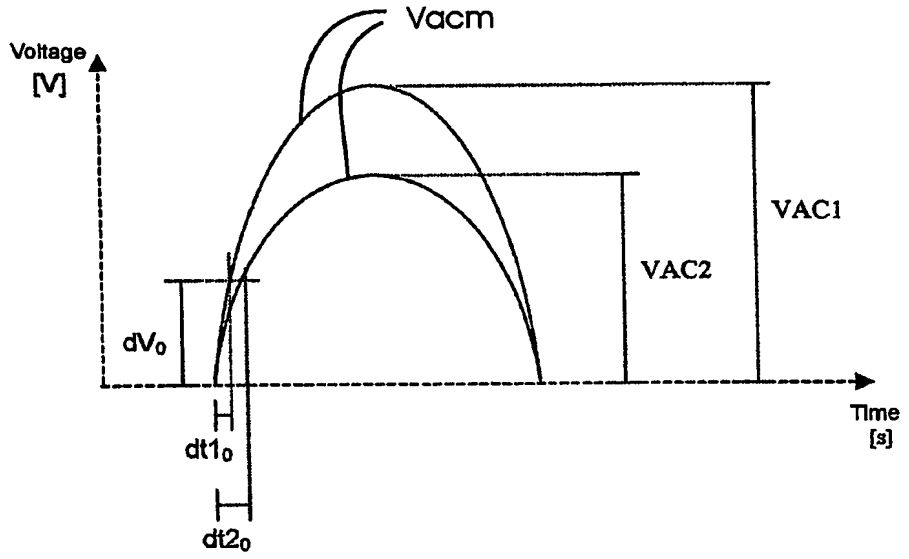
(74) Agent: DANNEMANN, SIEMSEN, BIGLER & IPANEMA MOREIRA; Caixa Postal 2142, Rua Marquês de Olinda, 70, CEP-22251-040 Rio de Janeiro, RJ (BR).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*[Continued on next page]*

(54) Title: AN ELECTRIC MOTOR MOVEMENT CONTROLLING METHOD, AN ELECTRIC MOTOR MOVEMENT CONTROLLING SYSTEM AND A COMPRESSOR.




(57) Abstract: An electric motor movement controlling method, the electric motor being fed by a total voltage ($V_T$) proportional to the network voltage ($V_{AC}$), the method comprising steps of making a first measurement of level ($V_{t10}$) of the network voltage ($V_{AC}$) at a first moment of measurement ($t1_0$), Making a second measurement of level ($V_{t20}$) of the network voltage ($V_{AC}$) At a second moment of measurement ($t2_0$), calculating the value of the derivative of the values of voltage measured in function of the first and second moments of measurement ($t1_0$, $t2_0$), to obtain a value of a propor-tional network voltage ($V_{AC}$'), and altering the value of the total voltage ($V_T$) fed to the motor , proportionally to the value of the proportional network ($V_{AC}$'). A system that will implement the steps of the method of the present invention, as well as a compressor (14) comprising the system of the present invention are foreseen.

WO 2005/006537 A1

**Published:**
— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*